BEE JOURNAL

GEORGE W. YORK,

CHICAGO, ILL, SEPT. 4, 1902.

PORTY-SECOND YEAR No. 36.

WEEKLY

Three Generations of Dadants,



C. P. Dadant.

The Late Chas. Dadant.

L. C. Dadant.



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PROF. A. J. COOK.

This standard work on practical bee-keeping has just been thoroughly revised and brought down to date. About 100 pages and nearly 100 illustrations have been added, which makes it now a superb volume of 544 pages, with 295 fine illustrations. It is printed on clear white paper, and is bound in elegant brown cloth, gold-lettered.

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CHICAGO, ILL., SEPT. 4, 1902.

No. 36.



Comb Versus Extracted Honey .-The question is often asked by beginners, "Shall I produce comb or extracted honey ?" The question is not one to be answered offhand in a single word. The flora must be considered. Some kinds of honey, especially the darker and the stronger-flavored varieties, may find a ready market, even if not at a high figure, while the same honey in sections could hardly find sale at any price. The market must be considered. There are local preferences which can not be utterly ignored. Consumers in some localities may prefer extracted at the same price as comb. In other localities they will have none of it at any

The man must also be considered. One man has learned the trade of producing comb honey so as to make it more profitable, while another man in the same locality will make extracted more profitable. Perhaps the season should also be considered, although how is one to know in advance what the season is to be? If the season is unusually cool, the cool days, and especially the cool nights, will drive the bees out of the sections; and if honey be gathered in larger amount than necessary for the daily consumption of the colony it will be crowded into the broodchamber, crowding out the queen; while with extracting-combs the honey would be stored above. As illustrating this, see the following editorial from the Rocky Mountain Bee Jour-

This is one of the seasons when it would bare paid to run all of our apiaries for extracted honey. A fairly good crop might have been produced even if all new combs had to be built. In one of our out-apiaries are rigged about 25 colonies for extracted are rigged about 25 colonies for extracted honey, with the design of supplying our home city market. Full-depth extracting-supers were given with frames containing half-sheets of wired foundation. In every instance these supers (they hold 10 frames) have been filled and are ready for extracting. Comb-honey colonies in the same apiary have not finished one super apiece. The honey in the extracting-supers is all sealed and will yield 45 pounds apiece. In the section-supers three or four rows of sections in the middle are finished. The balance are unsealed and only half built out. The season, of course, accounts for this vast difference. In the extracting-supers a large cluster of bees could form, and comb-building was not seriously interrupted during the cold days seriously interrupted during the cold days and nights that prevailed during the first how. In the section-supers the comb-builders had to divide up into 25 little clusters, and these literally "froze out" during the aforesaid cold weather.

The Fourfold Bee-Hive.-Mr. A. W. Smith, of Sullivan Co., N. Y., wrote us as follows Aug. 11:

EDITOR YORK:—I answered an advertisement in the New York Herald, of a wonderful bee-hive, and received the enclosed letter, which I thought might interest you. I do not think it any improvement on the common hives in use in this country.

A W SMITH

A. W. SMITH.

A very interesting document is the circular enclosed, which might be worth printing here but for its length. It is hard to see what there is patentable about the "specially-constructed fourfold bee-hive," and hard to see what advantage it can have, although the circular assures us its advantages "are so obvious that even the layman can grasp and comprehend them at a glance."

It seems that in this hive there is no separate compartment for honey, at least the author says "there is no separate honey-section in my hive," and adds:

"The reason why, after years of experience, I can not endorse the separate honey-section is that the bees, in the first place, fill up with honey the empty nooks around the queen, and only after there is no more space here at all, they earry the honey into the section separated from the queen; this, however, greatly harms the breed, for the great quantity forces down the queen-bee from the bebreeding perches to such an extent that the family often degenerates or entirely declines family often degenerates or entirely declines by reason of too much honey.'

Isn't that richness for you? Just what the "breeding perches" are is not explained, although the writer of the circular says:

"My experience has taught me that the bees perform their work most industriously, and readily in an undivided section in which the queen-bee can freely move from perch to perch to arouse the population to industry.

What would happen if the queen should fall off one of the perches as she goes on her rounds "to arouse the population to industry " is not stated.

Is it possible that a sufficient number of dupes can be found to pay for the expense of issuing and advertising such a circular?

A Bad Case of Stinging.-Not long ago Editor Root had a little controversy with the bees, which he reported in Gleanings in Bee-Culture. Another fracas with bees has occurred at the Home of the Honey-Beesthis time no laughing matter. A horse belonging to Mr. Harrington was standing unhitched in a field in which was an unfenced apiary, and the horse got among the bees

Pretty soon the horse began to kick, and then a regular stampede ensued. The more the bees stung her the madder she became. She kicked two hives over, and, as if out of revenge, she would walk right up to a hive in front of her, and stamp one of her front hoofs right through it. She actually ran one foot

right through one super of comb honey, down into the brood-nest, and, such a racket Mr. Harrington arrived on the scene just in time to find the horse covered with bees and kicking everything in sight into smithereens. He managed to get her free, and started her for the open barn. He himself was literally covered with stings. He raked the bees out of his hair by the handfuls; and when he emerged from the yard there was scarcely a spot on his face or body that you could place a finger on without putting it on a sting; and the 'old mare'—well, she shared about the same fate.

Notwithstanding the dozens, and perhaps hundreds, of stings received, the curious part is that Mr. Harrington insists that after the first few stings the rest did not hurt, although he remembers feeling slightly sick.

As to the horse, Mr. Harrington treated it in the following manner:

He called for a pound of salt, and, in the meantime, proceeded to rake the bees off the horse. He wrapped the salt in a paper, and pushed paper and all down the horse's throat. She was beginning to swell, and it was evident she would die in a few minutes unless the salt would act, and something did act. Very soon the swelling began to ease up; the horse seemed easier, and, in the course of an hour, when given grain, she ate as if nothing had happened; and in two or three hours more she was driven home by Mr. Harrington, 2)4 miles, in the very buggy in which she had been hitched, and from which she kicked herself clear. With some binding-wire the thills were made to hold together, and man, horse, and buggy went to town as usual.

Boxwood is spoken of very highly by 8. E. Miller in the Progressive Bee-Keeper as a honey-yielder in Missouri. He has a fine lot of extracted honey from it, and says:

"June 10 is the date in my almanac for bees to commence on boxwood, but they com-menced on June 9, and did good work on all favorable days until about the 20th. Little trees not over four inches in diameterof the same ones that I have husbanded in the past—were full of bloom, and the roaring of the busy bees in their tops was certainly good music to my ear."

There Are Other Fools, Too .- General Manager Secor sends us the following clipping, which originally appeared in the New York Sun:

THEY FOOL THE BUMBLE-BEE-HIS HIVE-LOVING COUSINS TICKLE HIM AND STEAL HIS HONEY.

The men who study insect life have found that the big, black and yellow bumble-bee is often swindled of the results of his hard day's work at honey-gathering. The dapper little hive-bee knows how to play upon his weak-

The hive-bee is a thoroughly city dweller, living in a bee-metropolis which has its bee-mechanics, builders and nurses, bee-boards of health that look after the ventilation of the city and the removal of the garbage—bee-policemen who guard the hive against moths and other honey-thieves, with bee-queen to rule over all.

The clumsy, loud-buzzing bumble-bee, however, is a veritable farmer, and lives with a comparatively small family in his mud farm-house in the clover-fields. He is such a simple soul that the hive-bees look upon him as a bayseed.

Several of them will meet him when he is on his way home with a load of honey, and induce him to stop and have a chat in the bee-language. Then they pat him and rub him, and the bumble-bee loves to be tickled. Thus they work upon his good nature until he actually lets them take part of his bag of sweets—all of it sometimes.

When he has been robbed in this fashion the smart hive-bees bid him an affectionate good-by, acting just as if they were slapping him on the back, and probably telling him that he must come up to town and take dinner with them some day when he is not busy. Whoever knew a bumble-bee to have a day to himself?

Then the robbers go home and lay their plunder away, while the bumble-bee sets out for his farm-house, congratulating himself upon having such good friends, likely enough, and quite convinced that he is indeed a highly popular fellow.

Mr. Secor's only comment on the above was this: "I never caught them at it."

Weekly Budget.

MR. AND MRS. UDO TOEPPERWEIN, of Texas, called at this office recently, when on their wedding tour. They were expecting to go East, and possibly get back to the Denver convention. We wish the happy couple a long and useful life.

THE LONE STAR APIARIST, of Texas, has suspended publication. This is unfortunate, especially for those who had their money invested in it. But it will be no surprise to those who know what it means to publish a bee-paper. There are a good many people who just know they can make a great success in the apicultural literature line—until they try it. Then they learn better. We are really sorry for our Texas friends, for they deserved success, at any rate.

EDITOR E. R. ROOT seems to inherit some of his father's rural tastes. The father has gone into the wilds of Michigan and built him a cabin in the woods two miles from the post-office, and now the son, restrained by business cares from getting so near to the heart of Nature, has moved his family out upon a farm 2½ miles from town, to get away from the smoke of factory and locomotives, and from the nerve-destroying shriek of whistles and clang of bells. He has an apiary on the farm where he can spend his evening hours.

The Death of Mr. Geo. F. Robbins we announced a week or two ago. He was in the employ of Mr. E. T. Flanagan, in Texas. Mr. Flanagan wrote us as follows, Aug. 23:

FRIEND YORK:—I have just returned from a trip to southern Texas, where I was called by a telegram announcing the sudden death of my manager, Geo. F. Robbins, formerly of Mechanicsburg, Ill. It was a sad blow for me, as I will find it hard to replace him,

for it will be hard to find a more faithful or honest man than he was. Peculiar in some respects, even eccentric, he was faithful to a high standard of duty. Intelligent, well educated, keeping abreast with the advancement of his favorite pursuit, he was above all a sincere Christian gentleman. I respected and loved him as a friend and brother bee-keeper, and none will miss him more than I. Would there were more like him.

St. Clair Co., Ill. E. T. FLANAGAN.

CONSIDERABLY DOUBLED-UP is what you might call Editor Hutchinson, of the Bee-Keepers' Review. Quite a good many years ago he was a double father all at once-a pair of twin girls came into the home. A year or so ago these same "twin girls" were married at the same time, so Mr. Hutchinson became a double father-in-law. And now-think of it!-one of these twin daughters has a little boy and the other a little girl, making Mr. H. a double grandpa. If he isn't a much-doubledup man we don't know who is. "Grandpa Hutchinson!" Sounds old, doesn't it? But he says he "Never felt younger or more energetic."

Many happy returns, grandpa!

MR. C. P. DADANT and youngest son, "Maurice," called on us last week when on their way home from Sturgeon Bay, Wis., where they had gone to settle up some business affairs of Mr. Dadant's father. It was the late Chas. Dadant's annual custom to spend a few weeks each autumn in Wisconsin. where he would be free from an attack of hay fever. One of his aged Iowa friends, also an octogenarian, who was always at Sturgeon Bay at the same time Father Dadant was there, when told of his death, decided to go there no more, as he would miss the companionship of Mr. Dadant too much to endure it. So this year he is going to the Pacific Coast for awhile. It only shows the strong friendships made by the late friend of bee-

Biographical.

1817 CHARLES DADANT. 1902

The news of the death of Charles Dadant came as a shock, notwithstanding the fact that at his advanced age it was a thing naturally to be expected. Many of those, however, who have enjoyed his youthful and vigorous style of writing were perhaps not aware that he was more than 85 years old at the time of his death, which occurred after a short illness, on July 16, 1902.

Charles Dadant was born at Vaux-Sous-Aubigny, in the golden hills of Burgundy, France, May 22, 1817. After his education in the college at Langres, he went into the mercantile business in that city, but ill-success induced him to remove to America. He settled in Hamilton, Ill., in 1863, and found a genial and profitable occupation in bee-culture, which, in his hands, yielded marvelous results. He soon became noted as one of the leading apiarists of the world.

In 1873 he made a trip to Italy to import the bees of that country to the United States on a large scale. Later he began the manu. facture of comb foundation, which has helped to make his name known.

It is true, however, that of late he has not written much, his son, Camille P., having come to the front as a writer of distinction to take his place. Neither is it in this country that Charles Dadant is best known as a writer. It is in the French journals that he was most at home; for in them he could use his native tongue, and although it might not be suspected by those who were familiar with his writings in the American journals, he never became so familiar with the English language as to converse freely in it. That the movable-frame hives with improved methods of management are to-day so much in use among French-speaking people is in a very large measure due to the strong influence of Charles Dadant, an influence used in the face of the opposition of the French journal, l'Apiculteur, for a long time the leading French bee-journal.

When 46 years old, Mr. Dadant came to this country, intending to make a business of grape-growing, a business with which he was familiar from childhood, but within a year he became so interested in bees that although he continued to do something with grapes the bees became the leading object of his attention. Dadant & Son made themselves known as large producers of extracted honey, as importers of Italian queens, and especially as the largest manufacturers of comb foundation in the world until recent years.

In 1886 he revised and republished the book of "Langstroth on the Honey-Bee," which has been styled "the classic in bee-culture." This work was published almost simultaneously in America, France, and Russia. The three latest editions were printed at Keokuk, Iowa, near his home. His teachings spread over the world, and there is not a civilized country where his name is unknown to progressive bee-keepers.

Charles Dadant married, in 1847, Miss Gabrielle Parisot. Mr. Dadant had two daughters, one of whom is the wife of E. J. Baxter, of Hancock Co., Ill., and one son, C. P. Dadant, with whom he has been in partnership since 1874, and with whom he lived till his death.

Mr. Dadant was of a cheerful disposition, and made friends of all who knew him. He had none of the infirmities of old age, and his death was but the flickering out of a lamp that has entirely used up its fuel, a worthy ending to a useful life.

Those who have had the pleasure of an acquaintance with Mr. Dadant in his own home will testify to his genial and cordial spirit, a spirit which it is a pleasure to know has descended to the son.

A Tribute from Mrs. L. Harrison.

The death of Charles Dadant has brought to my mind many pleasant reminiscences of a visit there, after the closing of the national convention of apiarists, held at Keokuk. Iowa. Carriages had been provided, and invitations to delegates to visit the bane and manufactory of comb foundation of Charles Dadant & Son. I accepted the invitation. and it has been a pleasant reminder ever since. After a pleasant drive of the miles more or less, from the town of Haudison. Ill. with congenial companions, we entered the grounds where there was a fine residence where three generations lived in harmony and love.

It is not every one who, having so at time.

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and money in establishing a new though would, as it were, give it away to might come in competition with they did. They had called together omen, and had every department in their w ation from the melting of the wax to hed product. It was noticeable how ought had been expended to reach of perfection in all the small details, least expenditure of time and the fin the go:

The senior Mrs. Dadant spoke the French The senior was basin spote the release in language only, which I could not comprehend. The wife of the son had a large smill and a little child to care for, so Father badant was delegated to entertain me. I remained over night, and in the morning he offered me his arm and showed me through the grounds, going among the buildings first; these were all upon substantial stone foundations, quarried from their own land. The buildings were quite numerous, and so far apart that if one burned the others would not. one was corrugated iron for storing wax, and Mr. Dadant said "it paid its own insurance." One building was devoted to the vineyard, containing implements for its culture and spraying; presses and other paraphernalia for spraying; presses and other paraphernalia for the manufacture of wine; a large cellar be-neath containing hogsheads of the fruit of the

rine.

I saw the stables and barn, in which I noticed that all bins for holding grain were lined with tin, preventing rats or mice from destroying their contents; a honey-house containing all the appurtenances of a model apiary and storage for barrels of extracted honey. I was shown the apiary with its large, 10-frame hives, and from there we went to the vineyard, with its vines neatly trained to wires, showing care and culture.

to the vineyard, with its vines neatly trained to wires, showing care and culture.

Mr. Dadant then said, "Now, you must see John's home." It was the colored man's, who spoke French. As we drew near the who spoke french. As we drew near the pleasant cottage, the loud barking of the dog proclaimed our arrival, and a bright-appearing colored woman opened the door with a child in her arms, and gave us welcome. She appeared so comfortable and happy, and her countenance beamed with gratitude as she sid, "Mr. Dadant built our home for us."

On our return across the field Mr. Dadant aid, "John is too kind-hearted; he spent his said, "John is too kind-hearted; he spent his wages every month. I said, 'John, you will be getting old after awhile, and you must save something.' But John could not do it. So he agreed that I should pay him only part of his wages, and I could save the rest for him, and now he owns a home. I encouraged my French workmen in like manner, and now they have homes of their own; and when we have no work for them they cultimate their vines, and work their ground."

when we have no work for them they culti-mate their vines, and work their ground."

What a philanthropist! Taking such kindly interest in those he employed. Though "the place that once knew him knows him no more forever," his kind deeds and loving counsel will continue to bear fruit upon the stony bank of the Great Father of Waters.

War was most by his carried to the county of the county o May we profit by his example.

MRS. L. HARRISON.

Extracts from the Bee-Keeping Press.

Gleanings in Bee-Culture, besides having a fine picture of Mr. Dadant, published a biographical sketch written by Dr. C. C. Miller, from which we take these paragraphs:

As briefly mentioned in Gleanings for July is, the death of Mr. Charles Dadant occurred July 16. A brief illness of 36 hours preceded his death, fulfilling a wish often expressed by him that he might never become childish, nor linger a burden to himself and others. Few men have lived to pass the 85th milestone of life's journey retaining such vigor of mind and h

When he reached America [in 1863] he knew not a word of the English language. He established himself on a small farm near Hamilton, and subscribed to Horace Greeley's paper, the New York Tribune, denying himself any French books or paper. In this way he found himself compelled to follow the Greeley has do not be the dark by the dark to the described of the dark to t events of the day by the use of a dictionary; and so great was his ability to learn, that, although then 46 years of age, within three years he knew English well enough to write articles for the Australia. articles for the American Bee Journal, then

published in Washington, D. C. His articles on "How I Became an Apiculturist," published in Vols. III and IV of the paper for 1867-68, were eagerly read. In 1869 he undertook the task of fighting the routine of European bee-culture by writing for the French, Italian, and Swiss bee-keepers. In 1874 he published a small book, "Petit Cours d'Apiculture Pratique," in the French lan-

guage.

Notwithstanding the clear and forceful manner of Mr. Dadant in writing English (although it never became easy for him to converse in that language), yet he wielded a pen of still greater power when writing in his native language; and the fact that the movable hive is to-day so much in use among French-speaking people is not a little due to the vigorous writings of Charles Dadant, the Dadant and the Dadant-Blatt hives being among the most common in France of movable-frame hives. able-frame hives.

In this connection it is not out of place to say that his son, Camille P., bids fair to become, like his father, a power at long range, for he has lately begun to furnish monthly articles of ability and interest to that standard French bee-journal, the Revue Internationale.

In 1874 Mr. Dadant took into partnership with him his son, C. P. Dadant, and together



CHAS. DADANT IN 1873.

they increased their apiaries till they reached the number of 500 or more colonies. They harvested at different times crops of 40,000 to 45,000 pounds of honey. Later they went into the manufacture of comb foundation. In 1873 Mr. D. went to Italy for Italian bees, and became a most successful importer, having been the first to ascertain what was necessary to keep bees alive on such long journeys.

It is pleasant to know that the familiar firm name, Dadant & Son, is to be continued, the son becoming the senior, and the son's son, Louis C., the junior member.

C. C. MILLER.

Following the foregoing Editor Root had this foot-note:

Charles Dadant, almost the last representative of the Langstroth and Quinby generation, was probably the best-known bee-keeper of any man in the world, for his writings have been read in both hemispheres. Langstroth wielded a great influence in America; but perhaps there is no bee-keeper in all Europe

whose hive and system were more fully adopted than those of our late departed friend. He was a vigorous writer in English; but, as Dr. Miller says, his pen wielded a still greater power when writing French.

I met him some ten years ago, and well do I remember the cordial welcome he extended, and how as I got into the extringe to divise to

I remember the cordial welcome he extended, and how, as I got into the carriage to drive to town, the old gentleman, with the warmth of feeling so characteristic of the man toward those he loved, leaned forward and grasped my hand and hung to it. I had not at that time written much on bees, and he knew me only through my father; but from his manner I took it he loved me because I was a son of A. I. Root, for, indeed, he and my father were very warm friends. were very warm friends.

Years ago Mr. Dadant imported queens from Italy. Like all imported queens these were leather-colored, and rather inferior-looking compared with the ordinary, yellow queens of the same race in this country. It was not long before Mr. Dadant was accused of sendiong before Mr. Dadant was accused of sending out hybrids for imported. At that time my father came to the rescue by saying that, if Mr. Dadant wanted to send out hybrids, he would mail mismated Italian queens of a bright color rather than to send the dark-colored, genuine imported of Italy, which he did. This little act pleased Mr. Dadant, and I think he never forget it.

I think he never forgot it.
Our business connection with the Dadants has always been of the pleasantest. Indeed, there are no better or more successful busi-ness men in our ranks than those same Frenchmen; and when they first advertised that every inch of their foundation would be equal to the samples, they lived up to the very letter of their guarantee.

am not so sure but the death of Mr. Dadant will mean more to the bee-keepers of Europe than to those of America. Indeed, it is wonderful that he could wield such a mighty influence in modern apiculture at such "long range," and in a foreign country, even if it was his old fatherland.

It is gratifying to know that his son, Camille, is also able to influence, as did his much-respected father, at "long range." E. R. Root.

FROM THE BEE-KEEPERS' REVIEW.

Chas. Dadant, at the advanced age of 85, passed away, after a short illness, on July 16. Forty years ago, when he came to this coun-Forty years ago, when he came to this country from France, he was a poor man with a family, and no knowledge of our language. Notwithstanding these disadvantages, he and his son, C. P. Dadant, have built up a most prosperous business in the production of honey, and especially so in the manufacture of comb foundation. Not only have they done much towards the building up of beekeeping in this country, but the mother country has not been forgotten—the name of Dadant being an authority in that sunny clime.

FROM THE CANADIAN BEE JOURNAL.

The bee-keeping world will learn with regret of the death of Mr. Charles Dadant, of Hamilton, Ill., on July 16, after a brief illness. Mamilton, III., on July 16, after a brief illness. Mr. Dadant was deservedly considered one of the fathers of American bee-keeping, and in his death the industry has lost one of its most faithful and devoted followers, and who, apart from his connection with the revisions and translations of that magnificent work, "The Hive and Honey-Bee," by L. L. Langstroth, has done much for its highest advancement. advancement.

FROM THE MODERN FARMER AND BUSY BEE.

The Modern Farmer and Busy Bee speaks thus of Mr. Dadant, through its editor, Emerson T. Abbott:

We are pained to be compelled to announce We are pained to be compelled to announce the death of one of our prominent bee-keepers and staunch friends, the senior member of the firm of Chas. Dadant & Son. Mr. Dadant was born in 1817, and died July 16, 1902, being in his 85th year. He was born in France, and educated in the language of his nativity. He never acquired an easy use of the English language in conversation, but, notwithstanding this, he was a very interesting conversationalist. He has been identified with the bee-keeping industry for more than a quarter of a century, and we are probably safe in saying that his name is known wherever a colony of bees is kept.

colony of bees is kept.

He was a man of that high type of character with whom it is a pleasure to associate, and after whom no one can read without being benefited. His home life was ideal, and he was revered and loved by those who knew him best. The writer has found a hearty welcome in a great many homes, but in no home has he felt more at home than during his visits at the home of the Dadants. "Father Dadant," as we were wont to call him, was a capital host, and while he made no pretentions to being a religionist of any kind, we have no hesitancy in saying that his

kind, we have no hesitancy in saying that his

outward life was that of an ideal Christian. outward life was that of an ideal Christian. It will be a long time before the bee-keepers pay the debt of gratitude which they owe to this venerable patriarch in the industry. He lived an excellent life, and at a ripe old age, without a lingering illness, no doubt died an ideal death. He has left us for something higher and better, we trust, but his work will repeat to bless the puriod generations yet. remain to bless the untold generations yet

remain to bees the union government to bees the union.

C. P. Dadant has been associated with his father in the comb foundation business from the start, and his son will now join him, and the firm name will be continued.

We shall miss the pleasant welcome of Father Dadant, and the interesting articles

from his pen, but there will be no change in the policy of the firm so far as the quality of their goods is concerned. We have done business with them nearly 20 years, and during all that time, if we have ever differed on a business deal to the amount of a nickel, we have not known it. To us, the word of a Dadant was always as good as a bond, and this has been true, because the goods have always been delivered according to the stipulation in the bond. The family has our profound sympathy in this, their hour of bereavement, and the best we can possibly wish ment, and the best we can possibly wish them is that their lives may be like the life of the friend and father who has gone out of their sight for the time being.

Convention Proceedings.

Report of the Texas State Convention, Held at College Station, July 16 and 17, 1902.

BY LOUIS SCHOLL, SEC.

(Continued from page 550).

The subjects regularly upon the program were taken up, and Prof. Wilmon Newell spoke as follows, on

The Preparation of an Apiary for a Honey-Flow.

This is a subject that is closely coupled with that of producing surplus honey, and together with the latter subject has received its full share of discussion in the bee books and periodicals.

The entire subject under present conditions is more adapted to a careful and full discussion by all, rather than a treatment by any one person. What I will have to say will be composed solely of facts and principles that are familiar to up-to-date bee-keepers, and therefore not of paramount interest.

I have nothing new to introduce, and shall only en-deavor to review briefly those methods of operation that have been found essential to the proper handling of a honey-On the other hand, it is to be expected that the experience of many bee-keepers, in various localities and un-der varying conditions, will bring to light many new ideas and methods of manipulation. For this reason I shall at-tempt no more than to introduce the subject, for the full discussion of which I feel sure will follow, and which, I hope, will bring to light many valuable points, that, at least to many of us, will be new.

HOW BEST TO PREPARE FOR A HONEY-FLOW.

The proper time to begin preparation for a honey-flow is the year before. All partially-filled sections, if we are producing comb honey, and all empty combs, if we are running for extracted honey, cannot be made better use of than by saving for use as "baits" the following season. For this purpose they should be placed in a tight super or hivebody and kept absolutely protected from mice, wax-moths, ants, and all manner of insects. It is also needless to say that they should be kept in a fairly dry room, where they cannot freeze. Many bee-keepers assert that these baits are worth their weight in gold; and, while I believe I would prefer the gold, they are at least worth more for coaxing the bees up into the super, at the beginning of the honey season, than could be realized from them if converted into wax and extracted honey.

At the approach of the honey season, there are three points to which I would call special attention :

The first is the gathering together of all tools and implements, getting the tools sharp and clean, and getting every thing into its place, where you can instantly put your hands on it when wanted. Of course in all well-regulated apiaries there is a place for everything, and everything in its place but also we are all whenevery and everything in its place, but, alas, we are all human, and, once in awhile, or perhaps twice in awhile, tools are mislaid. This is likely to entail a waste of time and labor in hunting for them when most needed, and when strictly, as well as literally, time is money, to say nothing of the fact that it is liable to be conducive to language very unbecoming to even a Texas bee-keeper

In addition to this, a sufficient supply of supers, extracting frames, hive-bodies, etc., should be nailed up and painted. If using sections, the supers should be filled with their proper number of fences or separators, and if the honey season is not too far distant, the sections folded, comb foundation inserted, and all made for immediate transfer to the hives. I would not advise the placing of foundation in frames or sections more than a month previous to use, as it does not retain its form and freshness as well as when kept in the original boxes, to say nothing of the exposure to in-

sect pests.

The second point to which I would call attention, and which, above all others, is of the most importance, is that of the most importance of the perioning of the having strong, hustling colonies at the beginning of the honey-flow. It has been repeatedly demonstrated that unless a full force of bees is present little or no work will be done in the supers. To attain this result best the colonies should go into winter quarters with plenty of stores and bees in each hive. As soon as possible in the spring, the colonies should be examined, and any that are weak should be stimulated by feeding. In localities where a reasonably good honey-flow is expected there is absolutely no question as to the profitableness of feeding. Only a small amount of cane-sugar is necessary, when fed daily, to stimulate brood-rearing.

During the forepart of June we conducted some experiments in the College apiary to determine the amount of sugar necessary to stimulate. At this time there was little if any honey coming in, and as a result of the shortage all queens had ceased laying. Both neuclei and full colonies were fed an average of 3 ounces of sugar per day, made, of course, in the form of syrup. Within a week the bees were rapidly building comb, and all queens laying. We bought sugar at this time at the rate of 15 pounds for a dollar, or 62/3 cents per pound, making the cost of feed per colony 11/4 Of course, earlier in the spring a larger amount would be necessary, owing to the increased consumption needed to maintain the temperature of the hive. It seems likely, though, that even then stimulative feeds should not cost on an average of more than 21/2 to 3 cents per feed for each colony.

The importance of thus feeding in order to have a strong force of bees at the beginning of the honey-flow, is readily seen when one realizes that approximately ten thousand bees are required to do the household work in an ordinary Suppose a colony to contain 40,000 bees, 30,000 of these will be field-workers—really the number which will be gathering surplus honey. On the other hand, suppose these 40,000 bees to be divided into two colonies of 20,000 each. In each hive will be required, as before, 10,000 bees for interior or household work, leaving but 10,000 field-workers to each colony, or 20,000 in all, as compared to 30,000 in the former case. The bee-keeper cannot afford to have weak colonies at the opening of the honey season, as a large part of the season at least will be required to build them. them up to a profitable working strength.

As a third important point, queens which are prolific should be used in all colonies; and while it may not be advisable to supersede poor layers during the honey-flow, this point should not be neglected, and as soon as a poor layer is found she should be replaced by a queen at as early a date as possible.

WILMON NEWELL.

In the discussion that followed, questions were asked as to which feeder was best adapted for this feeding. Of the different kinds used in the College apiary the division-board feeder, or "Doolittle Feeder," was found to be the

The required amount of syrup for feeding was discussed,

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as some did not think the amounts as given by Mr. Newell would be sufficient after several weeks, on account of the increased number of bees that would then be hatching. The answer was that at about that time the amount would have to be increased, but in the case of the experiment at the College apiary a light honey-flow came on at this time, which increased the food-supply sufficiently to make further stimulative feeding unnecessary.

BUILDING UP NUCLEI BY STIMULATIVE FEEDING.

Relative to the building up of nuclei by stimulative feeding, and having combs built out, the question was asked:

"Where is the proper place in the hive to put the full sheets of foundation to have them built out?"

The replies developed that this requires some good judgment and care. When adding a frame filled with founda-tion, this should be placed next to the last frame containing brood, or, in other words, on the outside of the brood-nest, to have it well-built out. It should not be placed in the middle of the brood-nest as many are prone to do, as such does very disastrous work at times. When honey comes in very sparingly, and this is not drawn out, the queen is very to use only the set of combs on one side of this sheet of foundation, neglecting entirely the combs on the other Then, again, when honey is coming in plentifully, these combs are generally drawn out fast enough, but filled with honey before the queen has a chance to deposit any eggs in them. Then the same condition prevails as before: One side of the hive is neglected, the combs on that side are filled with honey, and the colony is in a cramped condition. The queen is restricted to but half of the combs, and as a result there is a decreased amount of brood, and finally a weak colony.

When putting in foundation be careful. Put it outside the brood-nest, next to the brood, with the combs of honey (if there are any) on the outside of this, and then, when the foundation is drawn out sufficiently, place in the middle of the brood-nest, between combs of hatching brood, for the use

of the queen when she makes her next round.

Next a discussion on adding frames of foundation to full colonies, and in the spring, was also had. There is great danger when cutting the brood-nest, at this time, into two parts, as the bees are likely to neglect the queenless half or side on cool nights and during cool weather. This often results in a great loss of brood. It is better to give frames on the outside of the brood-nest, and then one need not lie awake on cool nights, during a cold, backward spring, and wonder if any brood is suffering, to entail a heavy loss for him later on.

Weak colonies and nuclei should have the brood placed next to one side of the hive, the west or sunny side being best, and then the other frames added towards the middle or other side of hive.

(Continued next week.)

黑龙龙龙龙龙龙龙龙龙龙龙龙龙龙龙龙龙龙 Contributed Articles,

No. 8.—Bee-Keeping for Women.

Dangers of Starvation-What and How to Feed.

BY EMMA M. WILSON.

One of the dangers that a beginner needs to guard against is the danger of starvation. She may think her bees bountifully supplied with stores in the early spring, and indeed they may have been, but she is not aware of the large quantity of honey needed to keep up the amount of brood-rearing that is necessary for the welfare of her colonies

Perhaps the first intimation she has that anything is wrong, she notices the remains of larvæ dragged out of the hive, the juices all sucked out of them-nothing but the white skins left. She is very much alarmed, and wonders what disease has appeared among her bees, when the sim-ple truth is, her bees are starving. If you should tell her so, she would be very sure you did not know what you were talking about. Starving, indeed! didn't she know that her bees had plenty of stores when she examined them only

two or three weeks before? She has very little idea of the amount of stores needed for brood-rearing. She has not taken into account the number of wet or chilly days when the bees were not able to gather any. Brood-rearing must go on just the same, and an extra amount of stores is con-sumed at such times in order to keep up the heat.

A good bee-keeper tries in every way to encourage brood-rearing in the spring, in order that the colonies may be as strong as possible and ready for the harvest when it comes. There can be no brood-rearing without the con-sumption of stores. Not only must the bees have enough stores for immediate needs, but they seem to look ahead and do better work if they have quite a surplus on haud. If the bees are allowed to come to actual starvation the danger is much greater, for not only is brood-rearing stopped, but much of the brood already started is destroyed. In this condition of affairs it pays to feed.

How shall we feed? By giving the bees combs of sealed honey, if you have them to give. There is no better way of feeding than this, but, unfortunately, we so seldom have enough of these combs. The next best thing is the

feeder and the best granulated sugar.

I know of no better feeder than the Miller. With this feeder it is a very quick and easy job to feed. You can put the feeder on the hive, put in the dry sugar, making a little depression in the center, and then add a very little water (either cold or hot can be used, much depends upon the weather which is best; if it is cool, better use hot); let it soak through slowly, so that the first that goes through will be sweet enough for the bees to take readily; after that add the water as you please. You need not be very particular about the quantity of water used. If only a small quantity of sugar is used, use about the same quantity of water. If a large quantity of sugar is used, add as much water as you can conveniently, and more water can be added from time to time as the sugar gets dry.

Another way is to dissolve the sugar with hot or cold

water, and pour the syrup into the feeder.

But you may have no feeder, and may not be able to to get one. Then the crock-and plate feeder will do. wait to get one. Put into the crock equal parts of sugar and water, stirring until dissolved. Put over the crock one thickness of woolen cloth, or five thicknesses of cheese-cloth. Put the plate upon the crock, bottom side up. With one hand under the crock and one hand over the plate, quickly turn the whole thing upside down. Place it on the top of the brood-frames and put an empty hive-body over it. Cover it up bee-tight, so that no bees can get to it only as they come up through the brood-frames.

If there are no neighbors' bees near you that you are afraid of feeding, you can feed out-of-doors just as well, setting the feeder a few rods away from the hives.

Do not imagine that the only time that your bees are in danger of starving is in the spring. It sometimes happens that in the very height of the season, even when bloom is very abundant, because of a prolonged cold, wet spell, or some other condition of the weather, there is no nectar coming in, and unless you are on the alert the first thing you

know your bees are dragging out their brood.

This year we had to feed our bees all through the month of June, and that with abundance of white clover in bloom all the time. Not a very encouraging prospect. Still, the bees must be fed. I must say I never realized before how much honey it took for their own consumption. It was a big relief, I can tell you, that the weather changed the first of July, and we had about ten days of very good weather, just at the time, too, that the bees had full benefit of the little basswood we have. They filled up their brood-chambers so that we have not had to feed up to the last of July, but I don't know how soon we may have to, if this wet weather continues.

Whatever you do, don't let your bees starve. that they have at least two or three weeks' rations in advance. You may be sure if they have more than they need they will not waste it. McHenry Co., Ill.

Necessity of Legislation Against Bee-Diseases

BY N. E. FRANCE,

State Inspector of Apiaries for Wisconsin.

FRIEND YORK:—I thank you for the editorial on page 531, on "Legislation Against Foul Brood." I find that I find that bee-keepers are like other people—selfish—and seem to care little for others in general. Unless they are in some way in danger of their bees getting disease they seem to care little about law or for others. Several times I have noticed the indifference of some good bee-keepers about diseases of bees, saying their bees and that part of the country had nothing of the kind; but when I showed them pictures I took only a few miles from them—of apiaries once profitable, 200 colonies reduced to 5, and another of 90 reduced to 1, and also diseased combs lying around on the grass—how anxious they were then to know what the law was, and whether the disease is endangering their bees.

Had it not been for importing foul brood into Wisconsin from other States, I could have had our State free of the trouble some time ago.

Each State can have just such laws on diseases of bees as its bee-keepers want, and will have them as soon as its bee-keepers will together ask for the same.

Now, the United States Census Report on bee-keeping in United States is to be had. I know the above to be true. I long for the day when every State will have legislation on diseases of bees, and no more importing of the same from other countries, or from one State to another. Foul brood and other diseases are not half as hard to handle as the behind-the-times bee-keeper.

Every State should have an experiment apiary conducted by a bee-keeper, said bee-keeper to be chosen by its State bee-keepers' association, and to conduct such experimental work as directed by said association. I hope to see such a day. Then bee-keeping will advance and be of great value.

Grant Co., Wis.



Evolution in Bees-"Nature and Nurture."

BY PROF. A. J. COOK.

I read with great pleasure the interesting article from Mr. L. Stachelhausen, on page 422. I always do read his articles with great interest. He knows a whole lot, and I usually find myself in hearty accord with his pen-strokes.

This matter of development in the bees has puzzled many abler than Mr. Stachelhausen or I. Even the great Darwin was staggered to harmonize fully his great discovery with our bees. Yet to me there seems no very great puzzle, nor any serious conflict with the laws of breeding or of transmission. Let us see:

In all organisms parents, either through some inherent tendency, as taught by Darwin, or more probably influenced by environment, are ever producing offspring varying from each other, which shows that it is more from "nurture than Nature." Thus while all parents tend surely to transmit their own peculiarities to their progeny—that is, all offspring tend surely to inherit the peculiarities—there is always as surely a like tendency to variation. And it is these two tendencies, coupled with "survival of the fittest," that has guided and controlled in all the developmental life-his-

Let me make the case or example concrete. A man sires children. He gives to them strong characteristics, to all of them. One is to transmit to his possible children these same prominent traits. Let us suppose this is a very united family, and always works together for the common good—like the apostles of old, "have all things in common." Suppose there are two children. One marries and is happy in a family, which he is able to surround with the best environment, and is wise to give or withhold as the best needs of his children suggest. The other does not marry, is not encumbered with family cares, and thus shares the productive resources of his fruitful labors with his less thrifty but more fortunate brother. Who can surely say but that this is not better for the world, in scattering more broadly the grand, sterling characteristics of this family than though both had offspring? A good motto for college classes is, "Not how much, but how well." Here the bachelor brother supplies means for the best possible nurture that the benedict has leisure and opportunity to give it. More children less well equipped would surely not be a richer gift to the world. One unique, like a Gladstone, a Beecher, or a Washington, is worth scores of those who never touch their kind to bless and help. If, as I fear, the neglect of busy fathers sends fine, promising boys to the slums, then surely means to banish this neglect would be beneficent.

Could we say that the bachelor brother did nothing to elevate the future in his failure to leave children? Did he not help to a development which carried grandly his own very characteristics also, rich in the blood of his brother into the life and work of the world? To doubt this is to doubt the grand work of nurture in the world's progression.

If, as seems likely, the whole work of sex-determination is dependent upon nourishment, who shall say that such division of labor as suggested here is not most inducatial in organic evolution?

If division of labor is the strongest factor in economic advancement, why, then, may not such division of labor as just suggested prove most potential in the best and most rapid development?

Do not all see at once the application of this example to our bees? Here, through varying the food, the bees develop a numerous "bachelor class"—the workers—which may never transmit their characteristics—for they shall never know descendants; but they may store such rich harvests of the best food, may prepare a food regimen so superexcellent that their own mother and fertile sisters shall the better transmit surely and generously all the good qualities which they bear and share. This mother-queen had the power to transmit them, else they would not possess them. She will hand her peculiarities as surely to her fertile daughters, and more richly because of their exceptional ministries.

Again, suppose, because of an exceptional environment, she produces workers of exceptional excellence. The exceptional environment may have come through better care and attention from her own sterile daughters. She will not only produce there excellent workers, but she will give to their fertile sisters, her own power—perhaps magnified—to produce also improved workers.

Thus the fact of sterile females is no bar to the work of development through "natural selection"—nay, may be its best aid. The fact is that differentiation has nowhere been so varied and marked, both anatomically and pysiologically as in the honey-bees, and no less wonderful work of the queen in laying nearly double her own weight of eggs each day. To appreciate this latter we have only to fancy a Brahma hen laying some 15 pounds of eggs a day, or a Jersey cow producing milk that would furnish us say 1,500 pounds of the best Jersey butter.

Los Angeles Co., Calif.



The Causes of Swarming-Its Prevention.

BY C. P. DADANT.

I notice the quotation, on page 499, of Dr. Miller's statement in regard to the prevention of swarming. I wish to make some remarks about it, and as the paragraph I wish to quote is quite short, it is perhaps as well to repeat it here. Dr. Miller says:

"One way to prevent swarming is to get the bees to rear a young queen about swarming-time. Giving a young queen reared elsewhere won't answer. I had a swarm issue with a young queen that I had given not a week before, she having just begun to lay, but when a colony has itself reared a young queen, and that queen has begun to lay, I never knew or heard of such a colony swarming till the next year. Gravenhorst gave this as reliable without being able to explain why the young queen must be reared in the hive itself."

My experience tallies exactly with that of Dr. Miller, but the difficulty is to rear a young queen in a colony just at swarming-time, and get her to lay before the bees swarm. My experience is that when a populous colony is made to rear queens during the swarming season it will swarm with the first queen hatched, more readily than if it had not been caused to rear queens at all. If, however, the first queen can be brought to lay, the other queen-cells have all been destroyed, the swarming fever is over, and the interruption in the laying between the taking away of the old queen and the laying of the new one-making a period of some 20 to 25 days—is sufficient to deter the bees from swarming. After the young queen has begun to lay, the season is already far advanced. But a young queen has this particularity: If she is healthy, she lays drone-eggs very sparingly. My father held that a queen preferred laying worker-eggs whenever she was not tired by incessant laying, and according to his views the young queen avoids laying in drone-cells simply because she feels vigorous. The drones when numerous are a great incentive to swarming. I might say, perhaps, that they are the greatest incentive of all when drones the swarming will be less frequent. Open a hive that has just swarmed, and in nine cases out of ten, you will find a great many drones. They are noisy, they are in the way, they make the workers more or less uncomfortable, hence the swarming.

When we give the bees a young queen just at the time

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of swalming, they usually notice the change from their own but in many instances it is only a temporary acceptance. I have seen this many times, when we used to import queens from Paly by the hundreds and introduced them in full colo-Often the bees would accept them quietly, but would lifely go to work rearing queen-cells with the intengetting rid of the stranger at the first opportunity. rate that is what I thought was their purpose, for I At a: many times seen the bees rear queen-cells in a hive a new queen had been introduced. As a matter of if this happens during the swarming time, there are ten chances to one that the bees will swarm out with the queen instead of killing her. The bees have almost become reconciled to her and they are reluctant to hurt her. So out goes the swarm. That is why, as Dr. Miller says, a young goes the swarm. meen may go out with a swarm from a colony to which she

had been given not a week before.

In our efforts at domesticating the bees and making them bend to our will, we must put up with their natural tendencies. If our work does not contravene with their native instinct we will succeed, but there will probably always be some difficulties which we cannot overcome. the very requirement to prevent swarming—the rearing of a young queen in the hive at the proper time—will be our undoing, if the bees conclude that the hive is too crowded

at the time when the young queens hatch.

I would like to suggest to those who wish to avoid natural swarming, to rely mainly on good, young, prolific queens of the previous year's rearing, for two reasons: The first is, that the removal of the old queen and the rearing of a young one at the opening of the harvest is sure to result in a weakening of the colony by the interregum of the greater part of a month, during which no eggs will be laid. the second is, the difficulty of preventing the swarm from issuing with the first queen hatched. It is true that the cells may be removed, all but one, but in a populous colony it is quite a task to make sure of all the queen-cells, and this would be practicable only in small apiaries, as it would entail a great deal of labor.

When all the conditions have been as favorable as possible to the comfort of the bees-shade, ventilation, and storing space amply provided, the production of drones reduced within the smallest possible limit-we find that there is but one very strenuous cause of swarming, and that is the supersedure of an old queen by her bees. As the laying has been long protracted, the queen begins to show signs of weakening, or of decrease in her laying, and the bees build queen-cells in the prevision of her decrepitude. Should the queen retain enough vigor, as she often does, to resent this treatment, an excitement is produced, and swarming results, even though the other conditions may be satisfac-So it is very certain that the older the queens are, the more probability there is of swarms.

Hancock Co., Ill.

The "Missing Link" in Queen-Rearing.

BY G. M. DOOLITTLE.

It was with more than usual interest that I read the articles on "Rearing Long-Lived Queens and Bees," by Dr. E. Gallup. And why? Because Dr. Gallup was about the only personal teacher I ever had in bee-keeping. Under date of the earlier 70's, I have a stack of letters nearly three inches thick, which the then Elisha Gallup wrote me, giving me the minutest instructions how to proceed along the different lines in bee-keeping I asked him about; and I have kept these letters all these years as a sweet memento of the man who had so much patience with a beginner in the mysteries of apiculture.

Brother Gallup and myself have aged nearly, or quite, 30 years since then, but I see by these articles on queenrearing of his that he is quite as young on this theme as he was at the time he wrote me that "Good, long-lived queens come only from cells in which there was a lump of royal jelly left after the queen had emerged from the cell." And that was 29 years ago. He was so emphatic in this matter, and made it so plain to me, that I soon discovered why I had so many queens lying dead at the entrance of their hives the spring before, for I had been rearing them on "the nucleus plan" recommended by some of the "leading lights" in queen-rearing of those days.

The next year found me rearing all my queens by natural swarming, coaxing colonies to swarm both early and

late in the season, that I might rear the more while the bees were under this magic of swarming. This I continued bees were under this magic of swarming. This I continued to do till into the early 80's, when I discovered a colony having two laying queens in it—mother and daughter. These two queens just filled that hive from end to end, and from bottom to top, with brood in May and June, and when the basswood bloom came on their workers filled the supers with honey equal to the way the hive had been filled with brood. The old queen died during the honey-flow. But the young queen lived to be nearly six years old, doing the best of work for five years.

This turned my head from queens reared by natural swarming to queens reared where two laying queens were tolerated in the hive at the same time, and the next time I found such a case—which was some two or three years later I took away the young queen as soon as she commenced -I took away the young queen as soon as she commenced to lay, and then cut out mature queen-cells as fast as the bees built them. In this way I secured the finest lot of queens I ever had known before, and, later in the season, after I had discovered the "cell-cup" plan, I gave this colony a frame of prepared cups, which they accepted at once, and turned out from them as fine a lot of queens as I ever saw, every one of which was long-lived, and of the best quality. And each of these cells had a lump of royal jelly quality. And each of these cells had a lump of royal jelly left in them, just as Elisha Gallup said there would be where good queens were reared.

From this sprung the plan as given in "Scientific Queen-Rearing," from which I have reared many queens that have given splendid service for four, five, and, in a few instances, well into the sixth year. And I wish to say to my indulgent teacher of the "gone-by" years, that in nearly every instance where I have cut open cells I have found that "missing link" present—that which Dr. Gallup pleases to term "an umbilical cord." I had noticed this cord many times in years gone by, when, in instances where I had more ripe cells than I needed for use, I would cut them open and critically examine the embryo queen to see in just what stage of development she was. And this cord has often been so strong that it would hold the queen-embryo suspended to the cell after I had rolled her out in my hand, or partially so, as far as the cord would allow, when it

would take quite a little force to break it.

Since the Doctor wrote his articles I have examined more closely into this matter, and every cell which I could spare since has been carefully opened, only to find in each case the tendrils he speaks of, as they run from this cord up the inside of the base to ths wax cell-cups, and all under and through the royal jelly in every conceivable direction. Therefore, according to my old teacher, the "missing link"—that which will produce the best of queens—is supplied in nearly every instance when using the plan of queen-rearing as given in " Scientific Queen-Rearing.

And this best of queens is as hundreds, if not thousands, have found it to be when using that plan, for I have hundreds of testimonials telling me that those using this plan now produce queens of far greater value than they were ever able to produce before using the same. And these hundreds and thousands can only smile a quiet, contented smile when told by Mr. Alley that queens so reared are "as worthless as so many house-flies." "The proof of the pudding is in the eating," and after having tasted of a really first-class article, none care to go back to the "makeshifts

To say that "a colony of bees will not rear good queens while there is a fertile queen present," shows the fallacy of many of the other statements and assertions made by the writer, for a moment's reflection will convince any thinking, reasonable person that 99 out of every 100 queens were so reared prior to the Nineteenth Century, queens which brought our bees down to us in as perfect condition as they were when the Creator pronounced them as "good."

And lest some may think that I have an "ax to grind"

in this matter, I wish to say that I am in no financial way interested in "Scientific Queen-Rearing." The same is the property of the publishers of the American Bee Journal, to use and to do with as they please.

Onondaga Co., N. Y.

[The price of Doolittle's "Scientific Queen-Rearing" is \$1.00 bound in cloth; or with the American Bee Journal one year-both for \$1.60. Bound in leatherette, price 60 cents, or with the Journal a year-both for \$1.30. Order from this office. - EDITOR.]

The Premiums offered this week are well worth working for. Look at them.

"Quoting the Honey Market" Again.

BY "RIP VAN WINKLE."

I have read the comments of the honey-buyers and commission men made in answer to the Editor's request to "give me what I am after," etc., and I see no reason to change my position on the subject as given in my article, that is, that the honey-producers of this locality ought to have an organization for the protection of their interest in such matters. And the general conclusion I arrive at, after reading all the replies is, that all practically admit that the market has been misquoted, most of the articles being devoted to explaining the reason why.

And now allow me to examine some of the statements. And now allow me to examine some of the statements. The Editor says that it is better to 1—, no. He says, "It is better to quote a cent lower rather than a cent above the market." So it is (for the buyer or commission-man). I don't dispute it; but I am looking at it, I frankly admit, from the selfish standpoint of the producer.

Mr. Muth "would suggest a broader range." That is, I suppose, from his standpoint, he being a philanthropist, and only in business for his health. Well, of course, it does make a difference, sometimes, which point of view you take, or whose ox is gored.

Then comes R. A. Burnett & Co., and, in a very moderate and conservative article, among other things repeats the Editor's statement: It is better to 1—, to be a little lower in the quotations given, than a little higher. "It is the desire of the commission merchant to quote as high as he dares, etc." (The italics are mine). Depending on his conscience, I suppose. Well! well!

Then comes Hy. Segelken, all the way from New York (I didn't say anything about the New York market, but it seems the shoe fit him, too), and after facetious remarks about my being asleep, and afraid to sign my name, proceeds to say:

"We endorse emphatically every word of Editor York's reply, especially where he says 'It is better to l—, no, quote a cent lower,' etc. Exactly this has been our rule ever since we have been in business."

As I observed above, I had not included the New York market in my article, as I did not at that time know that Mr. Segelken had been misquoting it for so long; and as for my name, there is an old Greek adage which says, "Consider not so much who speaks, as what is spoken," and Mr. Segelken practically admits the truth of my statement as to ly-, no, misquoting the market.

Mr. Weber seems to be the only one of these combination buyers and commission men who honestly quotes the exact prices that he gets.

Another gentleman, Mr. H. R. Wright, has a word to say, who seems to be legitimately a commission man (not a buyer), and I wish to call attention to what he says. He has been in the business 30 years, and he does not quite agree with these buyers, etc., but says on page 486:

"It is not wise to quote honey too high or too low, for quotations are seen by buyers as well as the producers, and it is extremely difficult to sell above quotations." And again, near the foot of the same page; "I do not understand why any party would want you to quote market under price, unless they want to use the quotation to help them buy in the country.

Now, isn't it about time that some one mentioned it, even a sleepy Rip Van Winkle, when three prominent buyers and commission men admit that "It is better to 1-, no. excuse me! better to quote the market differently from what it is? And, candidly, I would be not a little ashamed, even if I were a New Yorker, to admit that I had been ly-, excuse me again!-misquoting the New York market all these years, even if I had such an authority on commercial ethics as Editor York to wink at it.

But, gentlemen, what is the need of lying-excuse me quoting the market lower, etc.? You don't need to; as Joe Jefferson makes my famous namesake say about his glass of liquor, "You'd be better mitout it."

There is a business here in Chicago conducted on similiar lines. Shippers send stock to the commission man, on commission; stock is sold and returns made, etc. A journal is published in the interests of the shippers, wherein actual sales are reported. The editor publishes actual sales of all prominent transactions. He may make his comments on the state of the market, etc., but the shipper and stock-man who receives the paper can see for himself just what the market is, and can use his own judgment in his shipments. There is no lying or misquoting, and if his stock arrives on

a weak or falling market he can't blame the commission man for misleading him on quotations, at least.

There seems no good reason why this system could not be adopted by the bee-papers. Wouldn't it be better for all be adopted by the bee-papers. Wouldn't it be better for all concerned? Gentlemen—combination-buyers-and-commission-men—why not try it and see if you will not thrive just as well by telling the truth, and have the added pleasure of Cook Co., Ill.

[And to think that all our symposium on quoting the honey market was lost on "Mr. Rip!" This certainly is discouraging. But we'll let him "call names" if he wants to, and accuse us all of lying, for it seems to amuse him, even if everybody else knows his charge isn't true.-EDITOR.



CONDUCTED BY DR. C. C. MILLER, Marengo, Ill,

[The O testions may be mailed to the Bee Journal office, or to Dr. Miller d rect, when he will answer them here. Please do not ask the Doctor to send answers by mail.—EDITOR.]

Feeding for Winter Stores.

I have had bees a long time, and this is the poorest year I have seen for honey, some of my best colonies not having enough to take them through. What is best to do with them, feed or not? And what shall I feed them, honey or sugar? and how shall they be fed? and when? I have about 10 colonies out of 63 in this condition. I started with 29 colonies in the spring and now have 63; they are strong in bees but have not enough honey to take them through the win-

ter, and I do not believe they will get any more.
When I say to feed honey, I thought of taking out a comb that is well filled and putting it in for them; but even then they will not have enough for winter. IOWA.

Answer.-Increasing from 29 to 63, you have evidently had some after-swarms, and in a bad year it would have been the part of wisdom to prevent after-swarms or else to return them. It may be well to unite now any that are weak in bees and then feed those that need it. If you have enough combs of sealed honey to give the needy, nothing can be better. If not, then feed sugar and water in a Miller feeder or by the crock-and-plate plan. See page 567.

Catnip as a Honey-Plant.

What is the value of catnip as a honey-plant? I have a few bunches along the poultry-yard fence, and every day from morning until night the bees are working on the plants. Would it pay to plant out ½ acre, or an acre, of catnip for bees? Could the leaves or seed be utilized in any way. ILLINOIS.

Answer.—Catnip is a superior honey-plant, but I have some doubt whether it would be a paying investment to plant half an acre with it. The leaves are used as a medicine, especially for children, and if a market could be found for these there might be profit in the planting. In the life-time of Jesse Oatman, I saw at his place a cultivated patch of perhaps an eighth of an acre, but I think it was not considered wise to continue it.

Perhaps there are others who can answer definitely.

The Queen's Sting.

Last February I wrote for your idea in regard to the queen's so-called stinger being a feeler, to which you replied on page 153. When I read your reply I saw that I failed to express what I had meant.

My experience agrees with every condition in your reply. I should have written that my observation had been, and still seems to be, that instead of being a stinger it was a guage, with power of feeling used to place the egg in a uniform position in each cell, as you find them. Your clipping in reply to Ohio, page 409, is about my idea.

To-day I saw two queens up close together that had been

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out of their cells a short time, and the stronger, or older one, clinched the younger, or weaker one, and you would have thought she was pushing her stinger clear through her, right by the small connection of the two parts of the body. I rolled them around so I could have full view of what the process was. She tried to sting her, all right, or eise bite hard. The so-called stinger seemed to be too soft to penetrate the body, and made a performance like one of your black wasps will when you hold him by the two wings, so he cannot sting, as we used to do at school.

But the queen died in a few seconds, either from a sting, bite, hugging or fright. I found this young queen in a worker-cell head first, where she had crawled for protection. I notice the weaker queen does not make any resistance in a melee, so the victorious one could not very well get hurt.

This season I have found several queen-cells with the queen dead, and the head toward the bottom of the cell. CALIFORNIA.

ANSWER.—Confronted with such good authority as T. W. Cowan, I have been obliged to change my view as to the possibility of the sting being used by the queen as an aid in laying. Moreover, it is likely that I was wrong in thinking there is no need of a "feeler" at both ends, for workers have them. Cheshire tells us that, notwithstanding the swift work a worker makes in stinging, it always feels first the spot where it stings.

Taking Off Supers-Stores for Winter.

1. When is the best time to take supers off, in middle Wisconsin ?

2. Should all the frames in the brood-nest containing unsealed honey be removed when preparing for winter? If placed in the middle, and containing a little honey-dew, the bees will get the diarrhea, and if put towards the sides, for the bees to get at towards spring, the honey sometimes pops What is best?

3. Sometimes after the supers are taken off, the bees If such swarm is hived on empty combs and fed 20 pounds of sugar in syrup, will that carry a colony through the winter and until the next fruit-bloom?

WISCONSIN.

ANSWERS.—1. Take them off as fast as the sections are all or nearly all finished, whether that be in June or Septem-Take all off as soon as it is evident that storing for the season is over.

2. Honey-dew of such character as to give diarrhea should be removed from the hive and replaced with honey of good quality or with sugar syrup. In spring, after bees

are flying daily, it may be safely returned.

3. That will be likely to carry them through if the bees are cellared. For out-doors a fourth more would be safer. But let the feeding be done early.

Carrying Out Sealed Brood.

1. Something has gone wrong with one of my colonies. Here is the history so far as I know, together with present appearances: It was a swarm, having been hived on July 3, hence it is only a few days over a month old. It was a very large swarm, and during the first three weeks not only built frames of comb in the brood-nest down to the bottom, but filled one and partly filled a second super of sections. Over a week ago I noticed an apparent lack of energy in Over a week ago I noticed an apparent lack of energy in this hive; bees did not seem to be working, and acted as though something was wrong. I examined the frames carefully, but could not find a queen, although there was brood in all stages, even eggs. I noticed that a lot of the sealed brood was "bareheaded." However, since I found eggs I felt satisfied. Still the bees did not go to work, and seemed listless, walking about on the alighting-board in front of the hive. Yesterday and this morning I observed the bees busily engaged carrying out brood, some of it quite dead, but a good part of it still living, so that the young bees dragged out of the cells and thrown out could still move their legs, and some of them could even crawl around.

I at once opened the hive and examined the frames. I find no cells empty, and most of the remaining brood have the caps torn off and the bees are at work hauling the brood out of the cells. Some of it is dead, and some living, and some of it is hatching out in the natural way. But in a day or two the bees will have every brood-cell empty. The brood which the bees are carrying out is all taken from capped cells (there is no other in the hive at present).

few exceptions it is not colored, but is shrunken and short. There is no sign of a queen in the hive at present, and evidently has not been for some days, as there are neither eggs nor unsealed brood. About 10 days ago there was brood in all stages, and a large quantity of it. The combs or cells out of which the bees are taking the brood are clean and apparently very dry. When empty I noticed 2 or 3 small wax-worms in the cells along with brood, but so far as I have examined, not enough to account for the very abnormal condition of things. Can you give me any hint as to what is the matter, and what to do in the case? I do not like to lose a colony which started out so well.

2. Would you advise me to put a new queen with this colony in its present condition, or what would I better do with it first? Of course, if I can get the colony in working order again I intend to feed it up for winter. I forgot to say that at present it has plenty of sealed stores.

ANSWER .- I don't know what the trouble is, but it looks like a case of poisoning. Being past the time of fruit-spraying it is hard to make any guess as to the scource of the poisoning, if poisoning it be, so it is impossible to say what should be done, only to hope that the trouble may now be over. In any case it may be a good thing to supply the colony with a queen. If the trouble continues, try giving a frame of brood with some of it sealed, taking it from another colony, and see if they tear the brood out of the sealed cells the same as they do with their own brood. If it were only part of the brood that was carried out, it might be drone-brood, nothing being wrong, but from what you say it seems to be all the brood.

Are They Diseased ?- Paralysis.

Last June I found 2 colonies of bees had rotten brood, nearly one-half of it; it is not ropy or stringy. It dried up and the bees carried it out of the hives, and now some of the larvæ that are sealed up are dry, and some are watery. I think it will dry up, and the bees will uncap it and carry it out. There does not seem to be over one-tenth or less of the brood affected now, and they seem full of bees and pros-pering. Yesterday and to-day I find I have 3 colonies of bees that seem to have made drone-comb out of the workercombs, and they have dead dried, brood, and I think all the brood just before capping looks yellow. Are they queenless, or are they diseased?

I had two colonies that had paralysis; I changed the queen for queen-cells, and they appear to be all right now.

ANSWER.-The trouble seems a little like poisoning, and if it is poisoning it will disappear when the cause no longer exists. The rearing of drone-brood in worker-comb indicates drone-laying queens or laying workers.

Introducing Queens.

1. When a queen is introduced how is one to know whether the bees received her? Of course, one could wait until the brood already in the hive hatches out, and then examine for young brood, but that takes time-too much time.

2. I introduced a queen a few days ago (August 2) and would like to give her more bees. Can I take bees from another colony and give her? If so, will there be danger of their killing the queen? If so, how long after introducing the queen before that danger would be over

Answers.-1. If the queen is introduced immediately after the removal of the old queen, it will be about three weeks before all the brood from the old queen emerges from the cells: but there is no need to wait so long a time. Three days after the removal of the old queen all her eggs will have hatched, and if you then find eggs in the combs you may know that the new queen is laying. But if you do not find eggs at that time it is not by any means proof that the new queen is gone, for sometimes she does not lay for a week. By a little looking over the combs you can generally see the queen.

2. Yes, you can give more bees from another colony, but it must not be recklessly done. Something depends on the strength of the colony to which you wish to add the bees, and a good deal depends on the harvest. If honey is not yielding there is more danger. If the colony is very

weak, you must not give many bees. If they have three frames of brood, you may give a fourth with adhering bees, but it would not be safe to add two frames. The safer plan is to give them queenless bees. If you have no queenless bees, take the queen with two frames of brood and adhering bees from one of your colonies, putting them anywhere in a separate hive. In two days' time you can take from this queenless colony one or more frames of brood with adhering bees, and give to the colony you want to strengthen. Of course it will be better to take brood that is sealed. return to the queenless colony the queen with the two frames of brood.

Reducing the Number of Colonies.

I do not want over 5 colonies to keep over winter—I don't need more for my use, and I cannot sell colonies here for any more than the hives are worth. I have been doing just what farmers do with cattle, which they keep for family use. Some I keep for milk (honey), some I keep for just what farmers do with cattle, which they keep for family use. Some I keep for milk (honey), some I keep for breeders, and others I kill. I use the movable-frame hive with full, well-wired foundation. Those I keep over winter, I call my "breeders" (5 of them). They have the surplus one-pound sections and always produce enough comb honey. These are allowed to swarm in the natural layer hives ready with correlate comb from last comb honey. These are allowed to swarm in the natural way. I have hives ready with complete comb, from last year's building, which receive the swarms, and as fast as they fill and cap these combs I extract, leaving perhaps one or two of the center ones untouched. At the end of the honey-gathering season I—don't get shocked—I kill them with brimstone, and after extracting what honey is still in the hives, set the brood-chamber on top of one of the breeders, with perforated-zinc between. The hatched brood will strengthen the old colony, and by the beginning of December, when there is no danger of the beautiful for its production. ber, when there is no danger of the bee-moth doing mischief, I take off the brood-chamber and find the comb again entirely clear of brood, and in perfect order for the next year's work. Thus I keep 5 "breeders" and 5 completed broodchambers for use as stated.

Do you think I could safely strengthen my "breeders, if needed, by putting them where new colonies are, and shake the bees out of the latter in front of the breeders? Do you think there would be a fight among them, and perhaps do more harm than good? I know your method of putting a frame covered with bees into another hive, but I do not want to use my "honey" frames in with the breeders, if there is another way.

Your article on "Strengthening Colonies," by putting one hive where another has been, while many are "afield," will not answer my purpose, because the "breeder" may be as strong as the "milker," hence I would lose as many perhaps by being taken away from the old colony as would be gained in the new.

If you have any suggestions to strengthen my "breed" with those or some of those I would kill at any rate, PENNSYLVANIA. you will greatly oblige.

Answer.—I confess I don't feel entirely sure I understand you. You don't say when you want to strengthen

your breeders, but I suspect you mean when storing is over, You speak of putting your breeders where your new colonies are, which would lose to a breeder its own field-bees, an idea that later on you repudiate, leaving it a little muddy what you do mean. In any case, your fears as to danger from fighting may be well founded. Supposing that you want to strengthen thus your breeder about the time the harvest is over, you might do this:

Remove the queen from the colony that is to be destroyed, setting the hive on top of the breeder or close be-side it, leaving on the stand of the condemned colony a hive with the queen and one comb. This hive will catch all the older or field bees, and upon these you can wreak your sulphurous fury without loss, for these bees would not be likely to survive the winter; while the hive that has gone to keep company with the breeder has the younger and more valuable bees. Two days after this these bees will be fully conscious of their queenlessness, and there will then be no danger of their making any attack upon the queen of the breeder. Up to this time there must be no communication between the two hives—if the one has been on top of the breeder it still has its own bottom-board, After its two days of queenlessness, you are then to set it over the perforated-zinc as has been your custom, with no bottom-board between, but over or under the zinc put a piece of manilla paper or two or three thicknesses of newspaper, allowing no communication between the two stories except a hole through the paper large enough for one bee to pass at a time. The bees will gnaw away the paper, and when all brood is hatched out you can extract.

If I don't get your idea, come again and I'll try it over.

Feeding Bees-T Supers.

1. How did you feed that 1,000 pounds of sugar the past spring, in the hives or out of them?

Do you still adhere to the "T" super? and do you like

Do they sag at all?

3. Do you use any dovetailed supers with section-holders? If so, how do they act with you? I have had great trouble with their sagging, in some cases so badly as to close up the bee-space between them and the queen-excluders, or one super and the other.

4. Can "T" tins be used in a dovetailed super without

much changing?

Answers.-1. By means of Miller feeders, which are always put on top of the hives. In some cases a second story was put on a hive with a feeder over it, and filled combs were taken from this upper story to give to other

2. I still use the T supers and like them as much as r. There is not the least sagging, the upright part of the tin entirely preventing it.

3. I have not had the trouble you mention, but I have not used them to any great extent.

4. The super would have to be shortened inside, which could be done by putting in one end a board of sufficient thickness, or a thin board with two little cleats.

Prize = Winning

Daughters of Moore's famous long-tongued red clover Italian Queen, which won the \$25.00 prize offered by The A. I. Root Co. for the long-est-tongued bees; and also daughters of other choice long-tongued red-clover breeders whose bees "just roll in the honey," as Mr. Henry Schmidt, of Hutto, Tex., puts it. Untested Queens, 75c each; six, \$4.00; dozen, \$7.50. Select untested, \$1.00 each; six, \$5.00; dozen, \$9.00. Safe arrival andsatisfaction guaranteed. Circular free.

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Please mention Bee Journal when writing.

Bees Doing Fairly Well.

We had a very poor honey-flow the early part of the season, but it is now picking up and bees are doing fairly well. H. H. Mob. Lafayette Co., Wis., Aug. 20.

Disposing of a Laying Worker.

I had a case of laying worker like that on page 505. I take an empty hive, without frames, and put in two of the most empty frames, from the hive where the laying worker is, and then put a good queen with a few of her bees in a new hive, then put the new hive with the queen in the place where the hive stood with the laying worker, and put the queenless one on top of the other. When the bees come from pasture they will find them-selves in a strange place and will not fight the

back for the American Bee Journal we mail for but 60 cents; or we will send it with the Bee Journal for one year-both for only \$1.40. It is a fine thing to preserve the copies of the Jour-nal as fast as they are received. If you have this "Emerson" no further binding is necessary.

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In 2 or 3 days the rest of the bees and In 2 or 3 days the rest of the bees and can be transferred to the new hive. I this way on July 5, with good suche old bees were queenless since May were all gone now. I think it is the ointroduce a new queen, only the old ast be taken away, and the first frames without broad.

ANTON STANDARD did i safe without brood. ANTON SIMON. Co., Iowa, Aug. 18.

A Bulgarian Beginner.

It is not necessary to tell you that I am a beginner in bee-keeping, but I like it very

a teacher in the Orphan-House here.

In it live about 100 children (70 boys and 30 girls., and the larger ones like very much to work with me in the apiary, which consists of scolonies in Dadant-Blatt hives.

In the Bulgarian language there are two or three books or guides for bee-keepers, among which the best is, Bertrand's "Bee-Keeper's Almanac."

D. CHAKALOFF. Bulgaria

Unfavorable Season.

This has been a very unfavorable season for the bee-keeper in this vicinity. The month of June was so wet that the bees stored very little, but July proved very favorable, and those that were so situated as to catch the milkweed flow reaped a nice harvest. We are having very dry weather at present, and unless we get rain soon there will be no surplus from the fall flow.

I have about 10,000 pounds of white honey, mostly extracted. I hope for better weather soon.

IRA D. BARTLETT.

Charlevoix Co., Mich., Aug. 18. This has been a very unfavorable season for

Charlevoix Co., Mich., Aug. 18.

Very Poor Honey Crop.

The honey crop is very poor in this locality. Buckwheat and goldenrod are blossoming, but the weather is so stormy and cloudy ing, but the weather is so should that the bees cannot gather honey.

A. W. SMITH.

Sullivan Co., New York, Aug. 11.

Those Partially Filled Sections.

As the time of the year draws near when As the time of the year draws hear when the disposition of partially filled sections becomes a question of importance to the average bee-keeper, I think the plan I used last year will be of interest, especially as it was successful.

When the honey-flow ceased I took all the unfinished sections and divided them into two lots, according to the amount of honey they contained; those that were half completed or more in one lot, and those that had less than half in the other. The first lot I placed in supers in the ordinary way, and the others I put loosely in supers, breaking some of them so that the honey would run from the comb. This was to excite the bees to get them to do the work I intended them to do when I was ready for them.
I then nailed a lath on the top of a bottom-

board in such a manner as to form a bee-space, leaving an opening of two inches in the front for an entrance. A patent bottom-board will do as well if the entrance is contracted to two inches.

placed one of the supers, which had the sections in loosely, over a strong colony, and left it on until about noon the next day, when I removed it to the prepared bo'tom-board, with what bees it contained, and tiered up several other supers containing the same class several other supers containing the same class of sections on top of it, and finished with a cover, being careful that there was no other opening for the bees except that which was made intentionally on the bottom-board, and on the colony I placed a super with the sections in properly.

Results began to show immediately. At the color was the color of the

results began to show immediately. At first I thought there was going to be a case of old-fashioned robbing, but in a few minutes things quieted down except the bees from the colony which was intended should do the work. They worked the balance of the day,

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\$8.50 Cleveland and Return. \$8.50 on Sept. 26th and 27th, via Nickel Plate Road. Return limit of Oct. 28th may be obtained by depositing tickets in Cleveland. Three trains daily, with vestibuled sleeping-cars. American Club Meals, ranging in price from 35 cents to \$1.00 in dining-cars. Also meals a la carte. City ticket office, Chicago, 111 Adams St. For detailed information address John Y. Calahan, General Agent, 113 Adams Street.

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GUS. DITTMER, Augusta, Wis.

and the next morning went back to work and so continued, except when it rained, until I had all the honey in what sections it re-quired, and the other sections cleaned ready

quired, and the other sections cleaned ready for spring.

I found that it lost about 20 percent by being handled in this way, but I think that was better than having a lot of sticky comba around all winter, and the muss of putting them in supers in the spring.

Bees guarded the entrance to the supers as well as they did the entrance to their hive, and there was no signs of robbery after the first day, although I worked them about two weeks.

As fast as they would clean up a lot of sections I would remove them and put others in their place to be cleaned. On the colony I tiered up the same as I would in a honey-flow, only I used those sections which were more than half full.

As I was only experimenting I tried but one colony, but if I had many partially filled sections I would work enough colonies to do the work in a much shorter time, and I would use only very strong colonies.

C. M. Bradley.

Cook Co., Ill., Aug. 22.

Too Wet and Cold for Bees.

It was very cold and wet all through the spring, so the bees did not get built up very strong until the middle of June, and then there was nothing for them to do. It rained about half of the time, and it was too cold for them to fly the other half.

I never saw so much white clover in bloom in my life as this year, but not a bee to be seen upon any of it, and I do not see how they have done as well as they have, but they have found something, for they have stored some amber-colored honey, and some black as ink, which I think is honey-dew. We may get a short flow from goldenrod if the weather is so they can work.

Strafford Co., N. H., Aug. 19.

is so they can work. Ja Strafford Co., N. H., Aug. 19.

Foul Brood-The Rosemary Cure.

My first experience with foul brood was in the summer of 1890. I had never seen a case and did not know we had any in the community. I was working for extracted honey almost exclusively, therefore I had no occasion to go into the brood-chamber for examination, until I observed something of a serious nature was the trouble with some of my best colonies—they were on the decrease. Then I began to examine them. I had 49 col-onies, and had been extracting and exchangonies, and had been extracting and exchanging frames from one to the other, so I had scattered the disease thoroughly, through the apiary. Then I put on my thinking-cap, and wondered what was the trouble, and what would be the remedy. I began to read up, and was soon convinced that my bees had foul brood, and in the worst form.

foul brood, and in the worst form.

The honey season about closed, and the robbers ready to get in their work as soon as I took the cover off the hive. I tried the shaking process but it was not a success. During the next season it closed the business out for me. My neighbors had a few colonies and I began to look at them and found a number of cases of foul brood, so I concluded I would better keep out of the business for a while, believing it would not be long before they would be out also. I knew they had had no experience with the disease, and as long as the disease was in our community it was useless for me to attempt to keep bees, so I laid off until 1899, and came through all right that off until 1899, and came through all right that year. One of my neighbors had 3 colonies, and one of them died with the disease that winter. The next season I had two cases of and one of them died with the disease that winter. The next season I had two cases of it; the honey season came on, and one evening after they had all come in from the field, I closed the hives and took them away about half a mile from the apiary. The next morning I built a fire near them, and set an empty hive beside them, with a few frames with narrow strips of foundation in them; I opened the hives and shook the bees in front of the clean hive, so the bees could enter it, and put the frames and combs, and unhatched and put the frames and combs, and unhatched brood, on the fire where the flames consumed them; then I returned the bees to their former place in the apiary. After 4 days I took away

Buy them of H. G. QUIRIN, the largest Queen-Breeder in the North.

The A. I. Root Company tell us our stock is extra-fine; Editor York, of the American Bee Journal, says he has good reports from our stock from time to time; while J. L. Gaudy, of Humboldt, Nebr., has secured over 400 pounds of honey (mostly comb) from single colonies containing our queens.

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the consheets full of

foundation. They filled their hive brood and honey, and I saw no signs sease that season.

se spring of 1901, I bought a colony and to be in good condition and in bees; the combs were not straight brood-chamber, so I did not make an ation. When the honey-flow came I de the honey-board to put on extractmes, and there was some honey and hered to it. I put it up on a shed, near the bees to clean off, and they did it, e result was that in a short time I more colonies affected with the disstrong in the exami WAX 8 more colonies affected with the found

and the result was that in a short time I found 4 more colonies affected with the disease. I applied the same remedy to them, and I saw no more of the disease that year.

In the spring of 1992 I started with 34 colonies. May 15 I discovered I had the disease in several colonies. I had seen an article in the American Bee Journal, on page 198, where the essence of rosemary had been used with good results in several colonies with foul brood. I resolved to give it a test, with the next thing to no faith at all in its doing any good. May 16, I bought half a pint, paying 50 cents for it. May 17, I commenced using it on every colony I had, to make sure that none would escape. I filled a small oil-can and dropped 30 or 40 drops on top of the frames in the brood-chamber, being careful not to drop it on the bees, for it will kill a bee as soon as you drop it on it. I used it 3 times a week for about 4 weeks, and at the end of that period I could not find any of the disease in the apiary, and have not seen any up to the present date, and my bees never were in better condition than they are at the present time. in better condition than they are at the present time

The total cost of rosemary used on the 34 colonies was \$1.25. Some will say it may not have been genuine foul brood. Well, all I have to say is, it was the same as I had before, and I never have known a case of it to get well itself; and where they had it in the spring it increased very rapidly in June and July—it became so foul that it sent forth an odor so offensive that any one who had ever had anything to do with it before would not doubt its presence.

J. G. CRIEGHTON.

Hamilton Co., Ohio, Aug. 14.

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Tells all about Bees in California. The yields and Price of Honey; the Pasturage and Nectar-Producing Plants; the Bee-Ranches and how they are conducted. In fact the entire field is fully covered by an expert bee-man. Besides this the paper also tells you all about California Agriculture and Horticulture. \$1.00 per year; 6 months, 50 cents. Sample copies, 10 cents.

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HONEY AND BEESWAX

MARKET QUOTATIONS.

CHICAGO, Aug. 11.—Some comb honey produced in 1902 is now on sale. Fancy brings 15c; anything off in appearance or quality sells at 13@14c for white; amber grades, 2 and 3 cents per pound less. Extracted is selling at 6@7c for white; light amber, 5½@6c; dark, 5@5½c. There is a fair demand for all grades and kinds. Beeswax steady at 30c. R.A. BURNETT & Co.

KANSAS CITY, Aug. 16 .- The receipts of comb honey are increasing; so is the demand. New fancy white comb, 14c; No. 1, 13c; No. 2 and amber, 12½@13c. Extracted, white, 6c; amber, 5@5%c. Beeswax, 22@25c.
C. C. CLEMONS & Co.

CINCINNATI, July 26.—Considerable stock of 1901 crop fancy comb on the market and sells at 14@15c; there is a call for new comb honey, as yet none on the market; this market demands fancy comb; all other grades discourages trade. Extracted is in fair demand at 54@6c for amber and 7@8c for clover. Beeswax, 28@30c.

THE FRED W. MUTH CO.

ALBANY, N. Y., Aug. 22.—The demand for honey is improving with the unusual cool weather, the summer resorters returning home hungry. We quote: Extra white comb, 15@16c; medium, 14@15c. No other grades coming yet. We want to caution shippers against shipping by express, as it arrives almost invariably broken. Express companies are stamping the cases "Received at owner's risk," which seems to cause their employes to "play ball" with it. Freight handlers are slower, more careful, and less broken, and much cheaper. We advise sending by freight only.

H. R. WRIGHT.

New York, Aug. 11.—New crop comb honey from New York and Pennsylvania is beginning to arrive in limited quantities. There is a good demand for fancy white at 14c, and No. 1 at 13c, and exceptionally fine lots will possibly bring a little more. Lower grades quiet at from 10@12c. As to extracted honey, fancy grades are in good demand at from 6@6%c for white, and 5@5%c for light amber. Southern in barrels and half-barrels quiet at from 4%g60c per gallon, according to quality. Beeswax dull at from 27@28c.

RILDRETH & SEGELKER.

CINCINNATI, Aug. 19.—New comb honey is not coming in so plentiful, so far. Whatever has come in, and is fancy water-white, has brought a good price, and sold to stores from 15@16c. Honey kept over from last year, fancy sells for 14c. The market for extracted is more lively and brings—amber, from 5@5%c; alfalfa water-white, from 6@6%c; white clover, from 7@7%c. Beeswax, 30c. C. H. W. WEBER.

San Francisco, Aug. 20—White comb. 13@ 14:; amber, 10@12c; dark, 8@9c. Extracted, white, 5%@5%; light amber, 5&5%; amber, 4%@— Beeswax, good to choice, light, 27@29c; dark, 25@26c.

Not much offering or arriving of any sort. While the market is firm throughout, current values are being better sustained on comb than on extracted, for the reason that the latter has to depend to some extent on outside demand. All the comb housey offering will be required locally. The shipment of comb honey has never proven satisfactory, and the production is in consequence restricted to small compass.

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\$300,000,000.00 A YEAR and you may have part of it if you work for us. Uncle Sam's poultry product pays that sum. Send 10c for samples and partic-We furnish capital to start you in is. Draper Publishing Co., Chicago, Ill.

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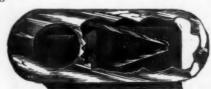
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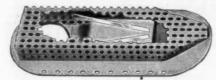
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